



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/291,316	04/14/1999	HYUN-SEOK LEE	678-258(P871	1934

7590 10/28/2002

PAUL J FARRELL ESQ  
DILWORTH & BARRESE  
333 EARLE OVINGTON BOULEVARD  
UNIONDALE, NY 11553

EXAMINER

ABELSON, RONALD B

ART UNIT PAPER NUMBER

2666

DATE MAILED: 10/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/291,316

Applicant(s)

LEE ET AL.

Examiner

Ronald Abelson

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-21 is/are allowed.
- 6) ☒ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 4, 7, 8, 10, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2663

*Drawings*

1. Figures 1 and 2 should be designated by a legend such as -- Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

*Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 5-6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art, and further in view of LaDue (US 6,185,198).

Regarding claims 1, 9, and 11, the applicant's admitted prior art teaches a method for transmitting user data in a

Art Unit: 2663

mobile communications system having at least one state transition (fig. 1, pg. 4 lines 8-18), at least one state transition including transitioning from an active state where user data is transmitted via a dedicated channel to a control hold state when user data is not generated for a predefined time in the active state (fig. 1 box 140, 130, pg. 4 line 19 - pg. 5 line 3) to transmit only control information via a dedicated control channel (releasing the dedicated traffic channel, pg. 4 line 19 - pg. 5 line 3). In addition, the prior art teaches releasing the dedicated control channel and transitioning to a suspended state when the user data to be transmitted is not generated for a second predefined time in the control hold state (thold, fig. 1 box 130, 150, pg. 5 lines 4 - 13).

The applicant's admitted prior art is silent on the process transmitting data via a common control channel.

LaDue teaches determining a parameter value / length of the message and comparing the parameter value with a predefined reference value / eight 48-bit words (fig. 4, col. 21 line 59 - col. 22 line 2). In addition LaDue teaches transmitting the user data via a common channel when the parameter value is less than the predefined reference value (RECC reverse control channel, col. 21 line 59 - col. 22 line 2). Note, LaDue teaches, "If

1,

Art Unit: 2663

longer text messages are to be sent then multiple sequential bursts of addition packets may be used" (col. 21 lines 64-65).

The cited references to LaDue (US 6,185,198) are also found in patent application 60/021,516 (fig. 4, pg. 59 lines 16-24).

It is well known in the art that the RECC is an access channel; see reference to Sawyer (US 6,134,438: col. 8 line 47-48). As stated by the applicant, "a physical common channel for the reverse link for transmitting a signal from the mobile station to the base station is called an access channel" (spec: pg. 3 lines 6-7).

Therefore it would have been obvious to one of ordinary skill in the art, having both the applicant's admitted prior art and LaDue before him/her and with the teachings [a] as shown by the applicant's admitted prior art, a method for data transmission in a mobile communication system comprising active control, suspended and dormant states, and [b] as shown by LaDue, transmitting burst data over the RECC channel, to be motivated to modify the system of the applicant's admitted prior art by modifying the system to transmit burst data over the RECC channel. This modification could be performed in software. This would improve the system by not requiring the system to change from the suspended state to the active state before transmitting data. This saves power and is applicable for small data bursts.

Art Unit: 2663

Regarding claim 2, transitioning to the active state to transmit data (spec: pg. 5 lines 4 - 13).

Regarding claim 3, the parameter value is a length of user data (LaDue: col. 21 lines 64-65).

Regarding claims 5 and 6, the suspended state is a slotted substrate (applicant: fig. 2 box 156) or virtual traffic substrate (applicant: fig. 2 box 153).

4. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art, and further in view of the combination of Gardner (6,038,455) and Dabak (US 6,272,166).

The applicant's admitted prior art is silent on receiving user data in the suspended state and storing the received data.

Gardner teaches that a half-duplex transceiver operating using an Aloha scheme (col. 12 lines 25 - 32). The examiner is equating a half-duplex transceiver operating in the suspended state when receiving data since the transceiver does not have to be at full power for data transmission.

Dabak teaches that the Aloha scheme may be used in CDMA (col. 4 line 66 - col. 5 line 14).

Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention that in order to demodulate data it must be stored.

Therefore it would have been obvious to one of ordinary skill in the art, having both the applicant's admitted prior art and the combination of Gardner and Dabak before him/her and with the teachings [a] as shown by the applicant's admitted prior art, a data transmission method in mobile communication involving an active control, suspended and dormant state, and [b] as shown by the combination of Gardner and Dabak, receiving and storing data in a suspended state, to be motivated to modify the system of the applicant's admitted prior art by using a half-duplex transceiver. This would improve the system of the applicant by allowing for efficient use of power.

Regarding claims 12 and 13, see claims 5 and 6.

***Allowable Subject Matter***

5. Claims 16-21 are allowed.
6. Claim 4, 7, 8, 10, 14, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2663

7. The following is a statement of reasons for the indication of allowable subject matter: Regarding claim 4, nothing in the prior art teaches or fairly suggests a generation frequency, in combination with the other limitations listed in the claim. Regarding claims 7, 8, 14, and 15, nothing in the prior art teaches or fairly suggests a burst substrate, in combination with the other limitations listed in the claims. Regarding claim 10, nothing in the prior art teaches or fairly suggests a paging channel, in combination with the other limitations listed in the claim. Regarding claim 16 and 18, nothing in the prior art teaches or fairly suggests transitioning to second suspended state when the user data generated is shorter in length than a reference value, in combination with the other limitations listed in the claim. LaDue, in contrast, teaches if longer text message are required then multiple sequential bursts may be used (col. 21 lines 59 - 67).

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.



Art Unit: 2663

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

*RA*

Ronald Abelson  
Examiner  
Art Unit 2663

*RA*  
\*\*\*

October 7, 2002

*Sema S. Rao*

*SPG AU 2666*

*10/18/02*